

United States  
Patent Application

Title:

**Kick-Boxing Bag**

Inventor:

Mark W. Ferry  
115 Valley Drive  
Florence, KY 41042

**Background of the Invention:** This invention relates generally to an exercise bag that is used for striking, usually with the foot, as part of an exercise routine or practice associated with one of the numerous martial arts that are currently in vogue as part of a fitness regimen. More specifically, the disclosed bag can be used as a resistance target in karate, tai kwan do, kick-boxing or any of the variations thereof.

**Description of the Prior Art:** Exercise bags have been part of the exercise environment for years. For example, U.S. Patent No. 291,015, issued December 25, 1883 to Rumsey, describes efforts to provide an air-tight bag offering a large surface area and light weight resulting in a bag with quicker movements and thereby allegedly affording a better form of exercise for the striker.

G.B. Patent 432,056, issued July 19, 1935 to Mallin describes a punching bag having an internal bladder that may be wholly or partially filled with water. The water content of the bag can be varied to alter the weight and, to some extent, the "yieldingness" of the bag. This bag is also equipped with straps to facilitate suspension.

U.K Patent Application 2,084,028, published April 7, 1982 describes an athletic bag having a valved, flexible container filled with water and gas under pressure providing a firmness and resistance to a blow delivered by a fist, hand or foot of a practitioner of any of the martial arts.

And finally, Soviet Patent Document 1720671 A1, dated March 1992, describes a punch bag with two coaxial sealed elongated chambers filled with substances of different specific gravities.

Notwithstanding the similarities of the exercise bags comprising the relevant prior art, unmet needs of exercise aficionados, particularly kick boxing devotees, remain for a

durable, light-weight kick bag that is readily suspendable to provide a cushioned resistance target that can be readily dismantled and easily transported to gym, home or office.

**Summary of the Invention:** Specifically, what is described herein is an exercise bag which comprises a suspendable enclosure, said enclosure having a top, a bottom and a continuously curving lateral side surface. Typically, the enclosure will be fabricated from a durable material able to endure arduous and protracted amounts of physical activity. The enclosure encompasses a padded structure, also designed to suffer the effects of repeated, regular physical forces and contacts. The padded structure, in turn, envelopes a resilient water-tight container, typically containing water, which can be removed and re-inserted at will.

**Brief Description of the Drawing:** Figure 1 is an elevated side view of the disclosed exercise bag in cross-section.

Figure 2 is an elevated side view of the disclosed bag.

Figure 3 is an elevated side view of the disclosed bag, suspended and ready for use.

Figure 4 is an elevated side view of the disclosed bag, in cross-section, disassembled.

**Description of the Preferred Embodiment:** For a clear and complete understanding of the disclosed kick-boxing bag, reference should be made to the drawing. Beginning with figure 1, the exercise bag 10 is depicted in its entirety. Typically, the bag will have a cylindrical shape and be about 50 centimeters in height. Readily apparent is the enclosure 12. The enclosure serves as the skin of the bag 10. It will incur all of the strikes and blows meted out by the practitioner as he kicks, jabs and chops the bag during his exercise regimen. Not surprisingly, the enclosure must be made of a durable material.

Historically, most exercise, punching or speed bags were made of leather or canvas.

Over the years, polyvinyl materials have become the enveloping material of choice. In addition to being durable, it is desirable for the enclosure to be relatively soft and gentle to the touch. Generally, heavily woven materials are too abrasive to the skin of the practitioner.

Within the enclosure 12, the exercise bag 10 contains padded structures 14, 14a, 14b and however many additional structures that may be required to adequately pad the exercise bag after the centerpiece 16 of the bag 10 has been inserted. The centerpiece 16 is a resilient plastic container, filled with a liquid, preferably water, that is inserted within the padded confines of the bag 10. Typically, the preferred centerpiece 16 is an empty two-liter soda pop container, filled with water to the shoulder 15 of the container and nestled within the padded structures 14 a, b, etc.

For easy insertion into the padded confines of the bag, the enclosure 12 has a removable top 11. The top 11 can be held in place by a variety of fasteners, including buttons, zippers, snaps or the preferred hook and loop arrangement 13 depicted in figure 1. The point is that when removing or installing the centerpiece 16, the top 11 of the bag 10 can be removed to permit installation. To avoid removing all of the padding structure 14 within the bag, structures 14a and 14b have been cut or formed to permit selective removal so that the primary padded structure 14 can remain intact in the bag 10.

To facilitate suspending the bag 10, as for example, in the middle of a room, or at least away from undesirable obstructions, the bag 10 can be hung as depicted in figure 3.

The bag is ideally fitted with a suspending strap 18, and more than one strap is deemed to be even more desirable. The bag 10 can also be decorated and equipped with a

circumferential stripe 21 to provide a target for the practitioner. Typically, the stripe 21 will be colored to contrast with the appearance of the enclosure 12.

Because the removable top 11 and padding 14 allow access to the vitals or interior of the bag 10, the centerpiece container 16 and its contents can be removed after a workout at the gym and the bag made lighter for the tote home. However, as a practical matter, removal of the container 16 will only be necessary during longer journeys when even a little extra weight can become a burden. But, after protracted pounding by the blows, jabs and kicks of the practitioner, the materials of the bag, and its components, may wear and weaken. Over time, the padding 14 may become compressed and it can be removed and replaced with new padding by simply removing the top 11 and making the exchange. Furthermore, the resilient centerpiece 16 may also weaken after hours of hard use and develop small cracks, which will ultimately leak the contents of the container. The eventual failure of the centerpiece container 16 is not seen as a design flaw. To the contrary, the concern is not if the container will fail, but when it fails. The centerpiece container 16, when filled with water to the recommended level 15 will compress and flex with each blow. Over time, the repeated compression will take its toll. And when it fails, the container 16 will it be easy and inexpensive to replace. After prolonged hard use, it is recommended and easy for the centerpiece container 16 to be removed and cursorily and routinely examined. When breaches are discerned, the availability and cost of a replacement centerpiece container 16 is not an issue and a "new" one can be readily inserted by removing convenient sections of the padding, e.g. 14a and 14b, and replacing them after the centerpiece container has been positioned.

Bear in mind that the shapes and locations of padding pieces 14a and 14b (and however many additional pieces of padding might be needed) are not important. All of the padding material 14 could be irregular and amorphous, but for purposes of aesthetics and ease of manufacturing assembly, regular, defined pieces of padding 14 are preferred, and, accordingly, are depicted in the drawing.

Figures 2 and 4 should certainly remove all doubt as to the simple purpose and relationship of the padding 14, 14a, and 14b to the centerpiece container 16. At the risk of belaboring the painfully apparent, padding 14 can be shaped to accommodate the largest portion of the container 16, padding 14b can be shaped to accommodate the neck and padding 14b can be shaped to provide additional padding between the container 16 and the top 11 of the bag 10. And, again, this invention disclosure is not confined to placing particular pieces of padding in predetermined locations within the bag. The padding is intended to protect the hands and feet of the practitioner; and, of course, cushion the impact on the resilient centerpiece container 16. Clearly, the purposes of the padding 14, in this instance, far outweigh its form.

While the foregoing is a complete and detailed description of the preferred embodiment of the disclosed exercise bag, it should be apparent that numerous variations and modifications can be made and employed to implement the all-important purpose of the uniquely constituted bag without departing from the spirit of the invention, which is fairly defined by the appended claims.